State of Alaska Epidemiology



Bulletin

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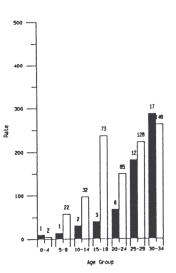
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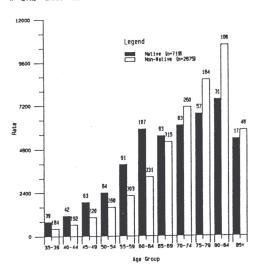
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DIABETES IN ALASKA

During the past four years, the Section of Epidemiology, Diabetes Control Program, has investigated the prevalence of diabetes and its complications in Alaska. We found that between 1984 and 1986 there were 3,719 persons with diabetes. As expected, prevalence was highest in older age-groups (Figure 1). Overall, the age-adjusted (to the 1980 U.S. population) prevalence of diabetes in Alaska was 1,357 per 100,000 population. This was lower than expected from several epidemiologic studies conducted in other states which found a prevalence of approximately 1,600 to 2,500 per 100,000 population. We believe that our methodology may have been unable to identify persons with diabetes who were relatively young and free of complications.

Figure 1. Diabetes prevalence in Alaska, 984-1986, Rates per 100,000 N = 3,713; Unknown = 125





Diabetic Complications

The numbers and age-adjusted rates of four complications of diabetes are shown in Table 1. Retinopathy was the most frequent diabetic complication with 18.0% of persons with diabetes having this diagnosis. The prevalence of retinopathy was similar for males (162.1 per 1,000) and females (173.5 per 1,000). The highest age-specific prevalence rate for blindness was among persons in the 25-29 year age group, 84.5 per 1,000 persons with diabetes. Amputations were more common among non-Natives with diabetes (prevalence of 23.2 per 1,000) than Natives (8.0 per 1,000). There was a strong association between amputation and retinopathy: 44% of the people who

had undergone amputation had also been diagnosed as having retinopathy.

Comments

Studies in several other states have attempted to estimate statewide diabetes prevalence rates by sampling representative populations, but our study is the first which we are aware of which attempts to determine the prevalence of diabetes and its complications for an entire state. Diabetic complications are preventable--the goal of the Diabetes Control Program is to reduce the incidence of blindness, amputation, end stage renal disease, and pregnancy complications among persons with diabetes.

Table 1	Number and age-adjusted rate of selected complications of diabetes, by race;	Alaska, 1984-1986
Table 1	Number and age-addisted rate of selected complications of diabetes, by race,	Industry 270 1 270

144.0 10 100.000		Non-Native		Native		Total	
	No.	Rate †	No.	Rate	No.	Rate	
Retinopathy	557	174.6	84	120.5	671	167.5	
Blindness	82	27.7	10	16.4	93	24.3	
Amputation	60	23.2	6	8.0	66	19.4	
ESRD*	28	9.4	9	13.6	37	9.7	

Per 1,000 persons with diabetes; adjusted to 1980 U.S. population by the direct method.

Acknowledgements

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End Stage Renal Disease.